



SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

Third session

Geneva, 9-16 July 1996

Item 4 (a) of the provisional agenda

NATIONAL COMMUNICATIONS

COMMUNICATIONS FROM PARTIES INCLUDED IN ANNEX I TO THE
CONVENTION: GUIDELINES, SCHEDULE AND PROCESS FOR
CONSIDERATION

Possible revisions to the guidelines for the preparation of national communications
by Parties included in Annex I to the Convention

Note by the secretariat

CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
I. INTRODUCTION	1 - 10	2
A. Mandate	1 - 5	2
B. Scope of the note	6 - 10	3
II. POSSIBLE ACTION BY THE SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE	11	4

Annex

Proposal for revisions to the guidelines for the preparation of
national communications by Parties included in Annex I to
the Convention

5

I. INTRODUCTION

A. Mandate

1. The Conference of the Parties, at its first session (COP 1), by its decision 3/CP.1,* requested the secretariat to prepare a report on the guidelines for the preparation of first communications by Parties included in Annex I to the Convention ("Annex I Parties") for consideration by the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI) before the second session of the Conference of the Parties (COP 2). Pursuant to the conclusion adopted by the SBSTA at its first session by which it decided to return to the further development of guidelines for the preparation of national communications from Annex I Parties at its second and later sessions (FCCC/SBSTA/1995/3, para. 33 (d)), the secretariat prepared a note for consideration by the SBSTA at its second session (FCCC/SBSTA/1996/3).
2. At that session, the SBSTA took note of the secretariat document and requested the secretariat to prepare a further report suggesting possible revisions to the guidelines, taking into account the submissions by Parties and the experience gained from the review process, for consideration at its third session, with the aim of allowing revised guidelines to be adopted at COP 2 in time for the preparation of second national communications by Annex I Parties.
3. At its second session, the SBSTA endorsed the proposals regarding the revisions to the guidelines to ensure consistency with COP decisions. The SBSTA requested that revised guidelines for the preparation of national communications by Annex I Parties contain more specific guidance on the description of policies and measures and their effects, projections and underlying assumptions and technological cooperation and transfer, using, where feasible, standardized formats and tables. The SBSTA requested that the revised guidelines also take into account the issues referred to by the SBI in its conclusions on the transfer of technology (see FCCC/SBSTA/1996/8, para. 60).
4. In considering a note by the secretariat on transfer of technology (FCCC/SBI/1996/5), the SBI, at its second session, recognized the need to improve the comprehensiveness, comparability and detail of information provided by the developed country Parties and other developed Parties included in Annex II to the Convention ("Annex II Parties") on the transfer of technology and know-how necessary to mitigate and facilitate adequate adaptation to climate change (see FCCC/SBI/1996/9, para. 49). It also requested the SBSTA to prepare recommendations on the guidelines for national communications by Annex I Parties for consideration by the SBI at its third session.
5. The SBI, at its second session, further recommended that the modifications to the guidelines should aim to improve the comprehensiveness, comparability and detail of

* For decisions adopted by the Conference of the Parties at its first session, see document FCCC/CP/1995/7/Add.1.

information provided in national communications and should reflect option 3 given in the secretariat document FCCC/SBI/1996/5 while noting the need for flexibility in reporting private sector activities (see FCCC/SBI/1996/9, para. 51).

B. Scope of the note

6. The annex to this note contains a proposal for revisions to the guidelines for the preparation of national communications by Annex I Parties. This proposal draws upon and attempts to reflect the views submitted by Parties on this subject compiled in document FCCC/SBSTA/1996/MISC.4, as well as the experience gained from the review process. Consultations were also carried out with experts from the secretariat of the International Energy Agency and from the secretariat of the Organisation for Economic Co-operation and Development. The secretariat has endeavoured to incorporate, as far as possible, the different points of view, with the aim of preparing a balanced and yet improved set of guidelines. In several cases, the secretariat's own suggestions have been added. The secretariat is fully responsible for the proposal as a whole.

7. The note should be read in conjunction with its addendum on methodological issues, the compilation and synthesis of national communications (FCCC/CP/1996/12 and Add.1 and 2), the secretariat's note on the process for submission and review of national communications (FCCC/CP/1996/13) and the report on the guidelines for the preparation of first communications by Annex I Parties (FCCC/SBSTA/1996/3), all of which complement the discussion in this note.

8. The proposal seeks to encourage the presentation of information in ways that are consistent, transparent and comparable. Proposed deletions from the guidelines for the preparation of first communications are indicated by strike-out, and proposed additions for inclusion in the revised set of guidelines are indicated by bold text. Significant changes to the text are explained briefly in endnotes.

9. The present document does not attempt to discuss or summarize the specific scientific, methodological and technical issues arising from the Guidelines for National Greenhouse Gas Inventories adopted by the Intergovernmental Panel on Climate Change (IPCC), but notes that a separate process for the consideration of possible improvements is under way in the IPCC and is scheduled for discussion at its plenary session in September 1996. The addenda to this document, do, however, discuss methodological issues related to temperature adjustments, electricity trade, bunker fuels, the use of global warming potentials and the land-use change and forestry sector. This note does not consider the issue of adjustments to the guidelines and procedures for national communications for Annex I Parties with economies in transition (see FCCC/CP/1995/7, para. 47). It should be noted, however, that the information acquired through the review process concerning Parties with economies in transition is explicitly mentioned throughout the compilation and synthesis of national communications (FCCC/CP/1996/12/Add.1).

10. In preparing this document, the secretariat has been aware that some information is available from other international sources (for example, on energy, financial assistance and research and systematic observation) and that there is a separate process for reporting on activities implemented jointly established by decision 5/CP.1 of the COP, and by adoption of the initial framework for reporting activities implemented jointly by the SBSTA at its second session. In the interests of completeness, however, and to encourage the communication of full information on the implementation of the Convention, the secretariat has nevertheless included requests for such information in the proposal contained in the annex to this note.

II. POSSIBLE ACTION BY THE SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

11. The SBSTA is invited to consider the proposal for revisions to the guidelines for the preparation of national communications by Annex I Parties contained in the annex to this note. On this basis, the SBSTA may recommend to the COP at its second session that the Conference adopt revised guidelines for the preparation of national communications by Annex I Parties, taking into account the conclusions adopted on the methodological issues discussed in the addendum to this note. The SBSTA may also recommend that the COP request the SBSTA to consider possible additional revisions to the guidelines arising from, *inter alia*, any modifications to the IPCC Guidelines for National Greenhouse Gas Inventories and any further consideration that may be required of the methodological issues discussed in the addenda to this note.

Annex

**PROPOSAL FOR REVISIONS TO THE GUIDELINES FOR THE PREPARATION OF
NATIONAL COMMUNICATIONS BY PARTIES INCLUDED IN ANNEX I TO THE
CONVENTION¹**

Guidelines for the preparation of ~~first~~-national² communications by Annex I Parties*

1. The guidelines for the preparation of communications by Annex I Parties have three principal purposes:

- (a) To assist Annex I Parties in meeting their commitments under Articles 4 and 12;
- (b) To facilitate the process of considering the national communications, including the preparation of useful technical analysis and synthesis documentation, by encouraging the presentation of information in ways that are consistent, transparent and comparable; and
- (c) To ensure that the Conference of the Parties (COP) has sufficient information, **in accordance with Article 4.2(d)**, to carry out its responsibilities to review the implementation of the Convention and the adequacy of the commitments in Article 4.2(a) and (b).

Coverage

- 2. In accordance with Articles 4.1(j) and 12.1(b), a communication should address the full range of a Party's actions to implement all its Convention obligations, including those relating to adaptation, research, education and other actions, in addition to those to limit emissions and enhance sinks. With regard to Annex II Parties, this would include measures to implement Article 4.3, 4.4 and 4.5.
- 3. In accordance with Articles 4 and 12, a communication should address all anthropogenic emissions and removals of all greenhouse gases not controlled by the Montreal Protocol.

Cross-cutting issues

- 4. Quantitative data related to inventories and projections of greenhouse gas emissions and removals should be presented on a gas-by-gas basis **in units of mass (Gg)** with emissions by sources listed separately from removals by sinks, except in cases where it is technically impossible to separate information on sources and sinks in the area of ~~land-use and~~ **land-use change and forestry**.³

* See document A/AC.237/55, annex to decision 9/2.

5. Apart from communicating emissions in units of mass, Parties may choose also to use global warming potentials (GWPs) to reflect their inventories and projections in carbon dioxide-equivalent terms using information provided by the Intergovernmental Panel on Climate Change (IPCC) in its **Second Assessment Report** ~~1992 supplementary report, pending the decision of the Conference of the Parties at its first session (COP 1). While awaiting updated information from the IPCC, a.~~⁴ Any use of GWPs should be based on the **direct-total** effects of the greenhouse gases over a 100-year time horizon. In addition, Parties may also make use of at least one other time horizon. ~~and may also include, separately, data incorporating the indirect effects of methane. This is only the initial focus and, for future communications, indirect effects of other greenhouse gases will have to be looked at, as far as scientific understanding allows.~~

6. Taking into account the provisions of Article 4.2(b), and in accordance with the conclusions of the Committee at its eighth session, the year 1990 should be the base year for inventories. The provisions of Article 4.6 are relevant in this context for the Parties included in Annex I undergoing transition to a market economy, and those Parties in their communications should propose to the COP the kind of flexibility they are seeking according to that Article.

7. ~~Parties may, if they so desire, also provide greenhouse gas inventory information for years subsequent to 1990.~~⁵

8. ~~The Convention requires that Parties provide information on projected anthropogenic emissions by sources and removals by sinks (Article 4.2(b)) as well as specific estimates of the effects of policies and measures on those levels (Article 12.2(b)). An effective process for the consideration of such information requires that such projections be provided for at least one common reference year. Taking account of the time period specified in Article 4.2(a), data should be provided for the year 2000. Parties are also encouraged to provide information for one or more years prior to 2000. In view of the objective of the Convention and the intent to modify longer term trends in emissions, Parties are further encouraged to include projections, if possible on a quantitative basis, that go beyond 2000 (for example, to 2005 and/or 2010).~~⁶

9. The transparency of national communications is fundamental to the success of the process for the communication and consideration of information. This transparency is particularly important for inventories of emissions and removals **of greenhouse gases** and for projections and assessments of the effects of measures.

10. When national communications present quantitative data related to inventories and projections of greenhouse gas emission and removal levels, the level of uncertainty associated with these data and underlying assumptions should be discussed qualitatively and, where possible, quantitatively.

10bis. Parties should provide additional relevant background information, if possible, but not necessarily, in a working language of the secretariat. Such information should include documentation on emission factors used, activity data, and other relevant assumptions, as well as technical reports on the projections analysis.⁷

10ter. When reporting on policies and measures and projections, Parties may refer to the "Methods for assessment of mitigation options" (chapter 27) and appendices 1-4, contained in "Climate Change 1995: IPCC Second Assessment Report, Volume III, Scientific-Technical Analyses of Impacts, Adaptations and Mitigation of Climate Change: contribution of Working Group II of the IPCC".

Inventories

11. Article 12.1(a) requires that communications include a national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol. At a minimum, information should be provided on the following greenhouse gases: carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulphur hexafluoride (SF₆). Parties are also encouraged to provide information on the precursors carbon monoxide (CO), nitrogen oxides (NO_x) and volatile organic compounds (VOCs), ~~as well as on other greenhouse gases, including, inter alia, perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulphur hexafluoride (SF₆).~~ Parties may also provide inventory data on sulphur oxides. As new gases with significant global warming potentials are identified, they should be included in the communications.⁸ Where methodological or data gaps exist, information should be presented in a transparent manner.

11bis. Parties ~~may should, if they so desire,~~ also provide greenhouse gas inventory information for years subsequent to 1990. Data should be provided for each year (where appropriate, updated) for the period 1990-1994 and, where available, for 1995. If possible, data should also be provided in an electronic version.^{9, 10}

12. The IPCC ~~Draft~~¹¹ Guidelines for National Greenhouse Gas Inventories should be used in estimating, reporting and verifying inventory data, ~~subject to paragraph 14 below~~¹². These inventory guidelines offer a default methodology available to any country that wishes to use it. Countries that already have an established and comparable methodology could continue to use that methodology, provided that they include sufficient documentation to back up the data presented. For Parties using the CORINAIR methodology or other "bottom-up" approaches, this would entail providing activity data and disaggregated emission factors as well as details of the correspondence between the IPCC source categories and those of the CORINAIR or other "bottom-up" approach used.¹³ Standard tables and formats recommended in the IPCC ~~Draft~~ Guidelines for National Greenhouse Gas Inventories¹⁴ should be used for presentation of data.

12bis. Parties should also provide inventory information on energy use for the three broad categories of industrial, commercial and residential uses, as such information would assist comparability and provide useful information to policy makers when considering the performance and potential of response measures.¹⁵

12ter. With regard to possible double counting or non-counting of emissions, Parties should provide a brief description of how feedstocks have been considered in the industrial processes source category of the inventory, in particular in the production of iron and steel and non-ferrous metals. Parties should also provide a brief explanation of the way in which CO₂ emissions in the waste source category have been considered, in particular indicating whether the IPCC methodology has been followed in excluding CO₂ emissions from organic waste combustion or aerobic decomposition of biogenic products and including emissions from fossil-fuel based products (plastics and hydrocarbons).¹⁶

13. To ensure transparency, enough information should be provided to allow the reconstruction of the inventory from national activity data, emission factors and other assumptions, and to assess the results. Annex I Parties should follow the IPCC Draft Guidelines for National Greenhouse Gas Inventories¹⁷ with respect to the presentation of methodologies, activity data, emission factors and other assumptions. Standard data tables do not provide the level of detail necessary to enable the reconstruction of an inventory. In this connection, IPCC worksheet 1.1 indicating the assumptions used to estimate CO₂ emissions from fuel combustion, using the IPCC Reference Approach, should be provided.¹⁸

~~14. In providing information on emissions from international aviation and marine bunker fuels, Parties should include such data, in a separate category, in their inventories of emissions on the basis of fuel sold and should, as far as possible, not include them in total national emissions. (This is in accordance with United Nations energy statistics practice but is different from the proposals in the IPCC Draft Guidelines).~~¹⁹

15. If Parties wish in addition to present their inventory data in other forms, *inter alia*, greenhouse gas emissions per capita, this information could be provided in a section of the national communication dealing with basic data (national circumstances). If possible, it would also be desirable to include some information on historical trends (for example, emissions and removals over the period 1970-1990) so as to put the inventory information in context.

15bis. In providing information on sequestration of carbon, Parties should provide the information in the worksheets provided in the IPCC Guidelines for National Inventories, for each category in the following tables: changes in forest stocks (table 5A, sheet 3), forest and grassland conversion (table 5B, sheet 5), and abandonment of managed lands (table 5C, sheet 3). Emissions of other greenhouse gases associated with these activities should also be listed, as appropriate. Historical trends should be included where available. Even if Parties do not use the IPCC default methodology, the results should be presented using the IPCC reporting format.²⁰

Policies and measures

16. Article 12.2 requires Annex I Parties to communicate information on policies and measures they have adopted to implement their commitments under Article 4.2(a) and (b). The national communications should describe all of a Party's policies and measures implemented or committed to ~~since the base year~~²¹ that the Party believes contribute significantly to its efforts to reduce emissions and enhance sinks of greenhouse gases. These actions need not have as a primary objective the limitation of greenhouse gas emissions. **Parties should identify which policies and measures are most important for the mitigation of greenhouse gas emissions.**

17. Parties ~~may~~ are also **encouraged** to provide information on actions implemented by regional and local governments or the private sector, ensuring that double-counting is avoided. However, some aggregation may be appropriate to maximize the utility of such information. The communications could also note policies and measures that have been adopted in the context of international or regional efforts towards coordination, as appropriate, of economic and administrative instruments in accordance with Article 4.2(e)(i).²²

18. The overall policy context for the policies and measures adopted should be presented. This could include reference to other relevant policies as well as elaboration of national greenhouse gas targets.

19. Communications of policies and measures should be organized by gas and by sector²³. This should, to the extent possible, be consistent with the categories set out in the IPCC ~~Draft~~ **Guidelines for National Greenhouse Gas Inventories**²⁴ ~~for inventories~~. **The description and evaluation of each policy and measure should examine reductions in all of the relevant gases listed in paragraph 11.**²⁵ Their description should, in principle, be structured along the following lines, as appropriate: ^{u/}

Carbon dioxide

- Energy and transformation industries
- Transport
- Industry (energy-related)
- Industry (non-energy)
- Residential, ~~and~~ commercial and institutional²⁶
- **Fugitive fuel emissions**
- Agriculture
- Land-use change and forestry

^{u/} Parties need include only those sectors where they have specific policies or measures to describe. Sectors might be further disaggregated, or other sectors added, as appropriate. Impacts of policies and measures should be included under each appropriate gas and sector. They need be described only once, where they have the most significant impact, with appropriate cross-references.

- Cross-sectoral

Methane

- Waste management (including sewage treatment)
- Agriculture (non-energy)
- Fugitive fuel emissions
- Industry (non-energy)
- Industry (energy-related)

Nitrous oxide

- Industry (non-energy)
- Industry (energy-related)
- Agriculture (non-energy)
- Transport
- Energy and transformation industries

Other greenhouse gases and precursors ^{b/}

- Transport
- Energy and transformation industries
- Industry (non-energy)
- Industry (energy-related)
- Residential, ~~and~~ commercial and institutional²⁷
- Land-use change and forestry
- Solvent and other product use

20. To facilitate transparency, enough detail should be provided about each individual policy and measure described in the **text of the** national communication to allow a third party to understand the action's objective and degree of implementation, as well as how the greenhouse gas effects of the action will be monitored over time. The following information should be included in the description of individual policies and measures.²⁸

- (a) Objective(s) of the measure in terms of the gas(es) and sector(s) targeted;
- (b) Type of policy instrument used by the measure (e.g. regulatory, fiscal, education, voluntary, research and development related to mitigation measures);
- (c) How the policy or measure interacts with other policies and measures described;

^{b/} Other greenhouse gases might be disaggregated if appropriate.

(d) Status of implementation of the policy or measure. (This should, where appropriate, make reference to a section of the national communication related to national circumstances that describes the policy-making process in the country or organization);

(e) How the measure is expected to function or is functioning; and

(f) Intermediate indicators of progress for policies and measures. (These may be related to legislative processes, emissions-related activities or the broader objectives of the policies and measures).

21. In their description of policies and measures, Parties ~~may~~ **should** also provide information relating to the cost of the policy or measure.²⁹

~~22. Parties may also briefly describe, in a section of the national communication dealing with basic data (national circumstances), policies and measures adopted and implemented before the base year that will have a significant effect on greenhouse gas emissions and removals after the base year.³⁰~~

22bis. Parties should report on action taken to implement commitments under Article 4.2(e)(ii) of the Convention, which requires that Parties identify and periodically review their own policies and practices which encourage activities that lead to greater levels of anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol than would otherwise occur. Such information could include, for example, details on financial support, price regulations, trade policies and investment/planning controls for energy-intensive activities, such as power generation and transportation.³¹

23. Under ~~the rubric of~~ Article 12.1(b), Parties may also briefly describe in a separate section of the national communication, policies and measures under consideration that have not yet been adopted ~~or committed to~~.³²

23bis. Parties should include in each communication a standard table summarizing information on policies and measures, with all fields of the table filled in, to the extent possible. The table should include the following basic information to be provided for each policy or measure: the type of policy instrument (for example, economic instrument, regulation or guideline, voluntary agreement, and information, education and training), the status of the funding of the policy or measure, its legal status and a quantitative estimate of its mitigation impact, or, if unavailable, a ranking of individual policies and measures according to their relative importance in mitigation.³³ Parties should use table 1 in appendix III to summarize the information provided on policies and measures.³⁴

Activities implemented jointly

23ter. Bearing in mind that a separate and distinct process for reporting on activities implemented jointly has been established by decision 5/CP.1 of the COP, and by the adoption by the SBSTA at its second session of the initial framework for reporting activities implemented jointly, Parties may wish to include relevant summary information on activities implemented jointly.

Projections and assessment of effects of measures

24. In accordance with Article 4.2(b), national communications should include a projection of future greenhouse gas emission and removal levels. The projection should, to the extent possible, incorporate the effects of policies and measures that are implemented ~~or committed to~~³⁵ when the national communication is produced (that is, a "with measures" scenario). In the interest of transparency, Parties ~~should be encouraged to~~³⁶ include "without measures" scenarios.

25. At a minimum, projections would be made of future emissions and removals of the following three greenhouse gases: CO₂, CH₄, and N₂O. Parties ~~should be encouraged to~~ provide projections of other greenhouse gases as well. Where methodological or data gaps exist, information should be presented in a transparent manner.

25bis. The Convention requires that Parties provide information on projected anthropogenic emissions by sources and removals by sinks (Article 4.2(b)) as well as specific estimates of the effects of policies and measures on those levels (Article 12.2(b)). An effective process for the consideration of such information requires that such projections be provided for at least one common reference year. Taking account of the time period specified in Article 4.2(a), data should be provided for the year 2000. ~~Parties are also encouraged to provide information for one or more years prior to 2000.~~ In view of the objective of the Convention and the intent to modify longer-term trends in emissions, Parties ~~are further encouraged to~~ should also include projections, if possible on a quantitative basis, ~~that go beyond 2000 (for example, to 2005 and/or 2010) for the years 2005, 2010 and 2020, recognizing that~~ uncertainties will be greater in more distant years.^{37, 38}

26. While Parties should present the projection on a gas-by-gas basis, as indicated in paragraph 4 above, they ~~should may~~ also disaggregate the results by sector.³⁹

26bis. Parties should summarize the projections data using tables 2-7 in appendix III.⁴⁰

26ter. Parties are encouraged to present projections from levels of emissions in 1990 - or other base years for some Annex I Parties with economies in transition - that are consistent with 1990 inventory data. Any differences should be explained.⁴¹

27. In accordance with Article 12.2(b), national communications should provide a specific estimate of the total effect on greenhouse gas emissions and removals of policies and measures. This specific estimate should, to the extent possible, take into account all policies and measures implemented or committed to since the base year (as outlined in paragraph 16 of this annex).

28. In addition, Parties should, wherever possible, provide estimates of the effect of individual policies and measures on future greenhouse gas emissions and removals. **This section could describe a sequence of events that bring about a reduction in emissions or a combination of instrument types or synergies with other measures. Parties may also describe the mechanisms that lead to reductions, as well as how they arrived at their estimates.**⁴²

29. In the interests of transparency, when projecting greenhouse gas emissions and removals, and estimating the ~~specific~~ **total** effect of policies and measures on emissions and removals, Parties should:

(a) Be free to use the model(s) and/or approach(es) they are most familiar with and which, in their view, provide the most accurate results;

(b) Provide enough information to allow a third party to obtain a qualitative understanding of the model(s) and/or approach(es) used and their relationship to each other;

(c) Summarize strengths and weaknesses of the model(s) and/or approach(es) used and provide an indication of their scientific and technical credibility; and

(d) Ensure that the model(s) and/or approach(es) used account for any overlap or synergies that may exist between different policies and measures.

30. To ensure transparency, national communications should include enough information to provide a third party with a quantitative understanding of the key assumptions used to develop projection(s) of greenhouse gas emissions and removals and ~~specific~~ estimate(s) of the **total** effects of policies and measures on emissions and removals. Taking into account paragraph 6 above, values of key ~~variables~~ **assumptions** should be clearly presented for the base year and **values of key assumptions**⁴³ for 2000, and for other years such as 1995, 2005, 2010 and 2020. Parties should ~~could~~ also provide information for the base year and 2000 on other key outputs of the model(s) and/or approach(es) used. **Parties should summarize key variables and assumptions by completing table 8 in appendix III.**⁴⁴ In addition, Parties may draw upon the illustrative lists of possible key assumptions and outputs ~~attached as an~~ included in appendix I.

30bis. If, in the projections analysis, Parties carry out any adjustments to base year emissions, for example for climate variations or trade patterns in electricity, these

adjustments should be reported in a transparent manner, with clear indications of the method followed. Both adjusted and unadjusted data should be provided.⁴⁵

31. When providing a qualitative discussion of the uncertainty associated with the results of projections and specific estimates of effects (see paragraph 10 above), Parties are encouraged to present the findings of sensitivity analyses illustrating how the results would be affected by changes in key assumptions.

Vulnerability assessment and adaptation measures

32. A communication should review briefly the expected impacts of climate change for the Party concerned and outline the actions taken to implement Article 4.1(b) and (e) with regard to adaptation. Parties are encouraged to use the IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptations.⁴⁶ Parties could refer, *inter alia*, to integrated plans for coastal zone management, water resources and agriculture.⁴⁷

Finance and technology (for Annex II Parties only)

(a) Overview information

33. Annex I Parties should provide an overview of activities undertaken in 1994, 1995, 1996 that facilitated transfer of or access to technologies.⁴⁸ Information on technologies that control, reduce or prevent emissions of greenhouse gases or enhance removals by sinks should be provided on a sectoral basis,⁴⁹ and, where relevant, include the following activities:⁴⁹

- research, development and evaluation of technologies;
- technology centres and networking;
- technology-related education and training;
- enhancement of market deployment of climate-friendly technologies;
- adaptation; and
- other activities, as appropriate.

⁴⁸ The term "transfer of technology", as used in this note, encompasses practices and processes such as "soft" technologies, for example, capacity building, information networks, training and research, as well as "hard" technologies, for example, equipment to control, reduce or prevent anthropogenic emissions of greenhouse gases in the energy, transport, forestry, agriculture, and industry sectors, to enhance removals by sinks, and to facilitate adaptation.

⁴⁹ Adaptation and the following mitigation sectors should be referenced, where appropriate: energy supply, energy demand in the residential/commercial/industrial sectors, transportation, forestry and agriculture.

(b) Financial data

33bis. In accordance with Article 12.3, Annex II Parties should incorporate details of measures taken in accordance with Article 4, paragraphs 3, 4 and 5. In particular, Parties should indicate how they have fulfilled commitments to provide "new and additional financial resources". ~~Taking into account Articles 11 and 21.3, t~~ The communications from Annex II Parties should report on actions to meet the obligations contained in Article 4.3, 4.4 and 4.5 by including:

(a) Information on **financial** contributions to the operating entity or entities of the financial mechanism (whether such are designated interim or permanent), **and to regional and other multilateral institutions and programmes, according to the format outlined in table 9 of appendix III, for the years 1994, 1995 and, if available, 1996; and**⁵⁰

(b) Information on financial resources provided through bilateral, ~~regional and other multilateral~~ channels for the implementation of the Convention (Article 11.5), ~~specifying whether such resources are related to climate change mitigation or adaptation; and~~ in the format outlined in table 10 of appendix III, for the years 1994, 1995 and, if available, 1996. Parties should also provide information indicating amounts and percentages of official development assistance, indicating, where possible, amounts spent on climate change related projects.

~~(c) — Other appropriate information, particularly with regard to technology transfer or access, with a delineation between governmental and private sector initiatives.~~

34. To the extent possible, the communications ~~from Annex II Parties could~~ should include information on expected future resource allocations consistent with the Convention provisions relating to predictable and identifiable resources (Article 11.3(d)).

(c) Private and public sector project information

34bis. Parties should provide a detailed description of 10 to 20 of the most innovative public sector projects or programmes that facilitated transfer of or access to "hard" and "soft" technologies in 1994, 1995 or 1996. Information should be presented according to the format outlined in table 11 of appendix III. In this discussion, a distinction should be drawn between government activities and government actions that facilitate private sector activities.⁵¹

34ter. In addition, Parties are encouraged to use the same format to provide a detailed description of 10 to 20 of the most important private sector projects or programmes that facilitated transfer of or access to "hard" and "soft" technologies in 1994, 1995 or 1996.⁵²

Research and systematic observation

35. Pursuant to Articles 4.1(g), 5 and 12.1(b), Annex I Parties should communicate information on their actions relating to research and systematic observation. This could include, inter alia, information on:

- Research on the impacts of climate change
- Modelling and prediction, including global circulation models
- Climate process and climate system studies
- Data collection, monitoring and systematic observation, including data banks
- Socio-economic analysis, including both of the impacts of climate change and of response options
- Technology research and development

36. The communications could address both domestic programmes and international programmes, for example, the World Climate Programme and the International Geosphere-Biosphere Programme, and the IPCC. They should also reflect actions taken to support related capacity building in developing countries.

37. The communications should be limited to reporting on actions undertaken rather than the results of such efforts.⁵³ For example, the results of research studies or model runs should not be included.

Education, training and public awareness

38. In accordance with Articles 4.1(i), 6 and 12.1(b), Annex I Parties should communicate information on their actions relating to education, training and public awareness. This would include information on relevant domestic programmes and participation in international activities. For example, the extent of public participation in the preparation or domestic review of the national communication could be reflected.

Special considerations

39. Article 4 of the Convention includes two paragraphs that allow for the provision of special consideration to certain Annex I Parties. Article 4.6 provides that "a certain degree of flexibility" shall be allowed by the COP to the Annex I Parties undergoing the process of transition to a market economy. Article 4.10 requires the Parties, in the context of Article 10, to take into consideration the situation of Parties with economies vulnerable to the adverse effects of the implementation measures to respond to climate change.

40. Some Annex I Parties may, in the context of their first communications, seek to be accorded such "flexibility" or "consideration". If this were to be the case, those Parties should be expected to state clearly the special consideration they were seeking and to provide an adequate explanation of their circumstances.

Basic data (national circumstances)

41. Although not explicitly required by the Convention, a Party may wish to provide other information relevant to its greenhouse gas emission/removal profile. This would permit readers to put the information on its implementation of the Convention in context, could help to explain certain trends and would provide data valuable in the analysis and aggregation of the submissions. The information would tend to be "historical" in character, although the appropriate time period would vary from country to country. Relevant information could include the following:

- (a) Population profile, for example, growth rates, population density and distribution, with some historical perspective (e.g. 1970-1990), and greenhouse gas emission per capita;
- (b) Geographic profile;
- (c) Climatic profile, for example, data on heating and cooling degree days and rainfall;
- (d) Economic profile, for example, **energy prices, energy taxes, fuel taxes, electricity prices, vehicle taxes, agricultural subsidies, information on the market structure in electricity, natural gas, coal and oil markets,**⁵⁴ gross domestic product (GDP), GDP per capita, GDP growth rates, GDP by sector, and imports and exports, with some historical perspective (e.g. 1970-1990), and greenhouse gas emissions per GDP;
- (e) Energy profile, for example, energy consumption (by sector, fuel type, per capita, per unit of GDP), **energy self-sufficiency, energy intensity and 1990 energy pricing for commercial and non-commercial consumers (including taxes),** with some historical perspective (e.g. 1970-1990); ~~and~~
- (f) Social profile, for example, information such as average dwelling size, number of vehicles per capita and per family unit, and personal and freight traffic (billions km/person) by type (air, rail, road and public/private); ~~and~~
- (g) **For sectors emitting large quantities of greenhouse gases, an outline of which level of Government has responsibility for implementing which policies and measures that impact on greenhouse gas emissions.**⁵⁵

Structure and executive summary

42. The minimum set of information identified in these guidelines should be communicated by a Party to the COP in a single document. Any additional or supporting information may be supplied in the main document or through other documents such as a technical annex.

43. A communication should include an executive summary that would present the key information and data from the full document. The executive summaries will be translated and distributed widely. In view of the limits on translation, it would be useful to envisage an executive summary of no more than 10 pages.

43bis. Parties are encouraged to organize the information communicated according to the indicative outline provided in appendix II.⁵⁶

Language

44. National communications may be submitted in one of the working languages of the United Nations. This would be without prejudice to the ulterior determination of official and working languages for the COP and the subsidiary bodies and for the Convention secretariat. Annex I Parties are also encouraged to submit, to the extent possible and where relevant, a translation of their communication into English.

Length

45. The length of a communication should be decided by the submitting Party. Every effort should be made to avoid overly lengthy communications in order to reduce the paper burden and to facilitate the consideration process. **Parties are encouraged to provide electronic versions of communications.**

Appendix I

Examples of key assumptions that may be required to project greenhouse gas emissions and removals or to estimate the specific effects of policies and measures⁵⁷

- **Assumptions on exchange rates between the domestic currency and the United States dollar**
- ~~World oil price (US\$/bbl)~~
- ~~Domestic energy prices (national currency/litre — fuel oil, gasoline, diesel; national currency/tonne — coal; national currency/kwh — electricity)~~
- GDP level (national currency) and annual growth rate (consistent with economic forecasts of the Party)
- ~~Population level (millions) and compound annual growth rate~~
- Interest rate
- Annual rate of autonomous energy efficiency improvement in total and by sector

- Total housing, including turnover (number of dwellings)
- Commercial floor space, including turnover (thousands of square kilometres)
- ~~Index of manufacturing production (specify index year = 100)~~
- ~~Index of industrial production (specify index year = 100)~~
- ~~Average new vehicle fuel economy by vehicle type (litres/100 km)~~
- Vehicle-kilometres travelled by vehicle type (thousands)
- Policy context (description of significant measures that reduce emissions or enhance removals that have been incorporated in the projection, as well as how they were incorporated)
- Rate of penetration and absolute levels of use of new end-use technologies

Examples of other key outputs that may be produced when projecting greenhouse gas emissions and removals or estimating the specific effects of policies and measures

- Primary energy production by fuel type (petajoules)
- Primary energy demand by fuel type, as well as electricity (petajoules)
- Energy demand by sector (petajoules)
- Final energy consumption by end-use (petajoules)
- Head of livestock (thousands by species)
- Rice cultivation (area cultivated in hectares)
- Nitrogen fertilizer and manure use (tonnes of nitrogen)
- Forest area cleared (thousands of hectares)
- Waste landfilled (tonnes)
- Waste water biochemical oxygen demand (kg)
- Energy imports/exports (petajoules)
- Primary energy per unit of production in the industrial and commercial sectors
- Energy consumption per square metre in the residential and commercial sectors
- Primary energy for transport (per tonne-km or passenger-km)
- Electricity and heat produced per unit of fuel used in thermal power stations

Appendix II

Indicative outline for presentation of information in communications

1. Executive summary
2. Introduction
3. National circumstances
4. Inventories of anthropogenic emissions and removals
5. Policies and measures

6. Projections and effects of policies and measures
7. Expected impacts of climate change and vulnerability assessment
8. Adaptation measures
9. Financial assistance and technology transfer
10. Research and systematic observation
11. Education, training and public awareness

Appendix III

Table 1. Summary of policies and measures: CO₂

Name of policy / measure	Type of instrument	Objective and/or Method of achieving reduction (including description of how effects take place)	Sector	Status of implementation (planned / implemented; legislation passed or not; status of funding)	Estimate of mitigation impact				Monitoring: intermediate indicator of progress
					2000	2005	2010	2015	
1.									
2. etc.									

Similar tables should be completed for CH₄, N₂O, NO_x, NMVOCs, CO, PFCs, SF₆ and HFCs.

Table 2. Summary of projections of anthropogenic emissions of CO₂ (gigagrams)

	1990	1995	2000	2005	2010	2020
Energy & transformation						
Industry						
Residential						
Commercial/Institutional						
Transport						
Other						
Total						

Table 3. Summary of projections of removals of CO₂ by sinks and reservoirs (gigagrams)

	1990	1995	2000	2005	2010	2020
Agricultural systems						
Managed forest systems						
Grazing systems						
Other processes						
Total removals						

Table 4. Summary of projections of anthropogenic emissions of CH₄ (gigagrams)

	1990	1995	2000	2005	2010	2020
Fuel Combustion						
Fugitive fuel emissions						
Industrial processes						
Livestock production systems						
Rice production systems						
Waste						
Other						
Total						

Table 5. Summary of projections of anthropogenic emissions of N₂O (gigagrams)

	1990	1995	2000	2005	2010	2020
Transport						
other energy sources						
Industrial processes						
Agriculture						
waste						
other						
total						

Table 6. Summary of projections of anthropogenic emissions of other greenhouse gases (gigagrams)

	1990	1995	2000	2005	2010	2020
SF ₆						
HFCs						
PFCs						
other (specify)						

Table 7. Summary of projections of anthropogenic emissions of precursors and SO_x (gigagrams)

	1990	1995	2000	2005	2010	2020
CO						
NO _x						
NMVOCs						
SO _x						

Table 8. Summary of key variables and assumptions in the projections analysis

	1990	1995	2000	2005	2010	2020
World coal prices (US\$/ton)						
World oil prices (US\$/bbl)						
Domestic energy prices (by fuel type and for electricity) for different relevant sectors (e.g. residential, commercial and institutional; industry; transport)						
GDP (domestic currency)						
Population (millions)						
New vehicle efficiency (by vehicle type) (litres/100km)						
Average vehicle km travelled						
Primary energy demand (Petajoules)						
Index of manufacturing production (1990=100)						
Index of industrial production (1990=100)						
Other						

Table 9. Financial contributions to the operating entity or entities of the financial mechanism, regional and other multilateral institutions and programmes

	Contributions (millions of US dollars)		
	1994	1995	1996
Global Environment Facility			
Multilateral institutions			
1. World Bank			
2. International Finance Corporation			
3. African Development Bank			
4. Asian Development Bank			
5. European Bank for Reconstruction and Development			
6. Inter-American Development Bank			
7. United Nations Development Programme			
8. Other			
a)			
b)			
c)			
Multilateral scientific programmes			
1.			
2.			
3.			
4.			
5.			
Multilateral technology programmes			
1.			
2.			
3.			
4.			
5.			
Multilateral training programmes			
1.			
2.			
3.			
4.			
5.			

**Table 10. Bilateral financial contributions for the implementation of the Convention,
1994
(millions of US dollars)**

Recipient country	Mitigation						Adapt- ation	Other*
	Energy	Transport	Forest	Agriculture	Waste manage- ment	Industry		
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20. All other								

* For greenhouse gas inventories, as under Article 4.1(a).

Similar tables should be completed for 1995 and 1996.

Table 11. Projects or programmes that facilitate transfer of or access to "hard" and "soft" technologies

Project / programme title:			
Purpose:			
Recipient country	Sector	Total funding	Years in operation
Description:			
Ministry or company, contact person, address and phone number:			
Impact on GREENHOUSE GAS emissions/sinks (optional):			

This table should also be used to provide a detailed description of 10 to 20 of the most important private sector projects or programmes that facilitated transfer of or access to "hard" and "soft" technologies in 1994, 1995 or 1996, as described in paragraph 34ter. of this annex.

Notes

¹ One Party (Poland) expressed the opinion, in its submission to the secretariat, that it was premature to introduce substantial changes, and that second communications should be prepared on the basis of the guidelines for first communications. Submissions by Parties are compiled in document FCCC/SBSTA/1996/MISC.4.

² This change was proposed by a Party (the United States) in its submission to the secretariat.

³ This change has been proposed to ensure consistency with the terminology used in the IPCC Guidelines for National Greenhouse Gas Inventories.

⁴ The changes here are based on the submissions by two Parties (Australia and the United States). It should be noted that issues related to GWPs are also discussed in the addendum to this document on methodological issues.

⁵ This paragraph has been moved to the section on inventories, and now has paragraph number 11bis.

⁶ This paragraph has been moved to the section on projections, and now has paragraph number 25bis.

⁷ The proposal contained in paragraph 25 of document FCCC/SBSTA/1996/3 was supported by a Party (Australia) in its submission to the secretariat. Another Party (Switzerland) noted that the availability of such material in an official language of the United Nations was limited, as were funds for translation.

⁸ A Party (the United States) proposed that the minimum reporting requirements be extended to include additional important greenhouse gases. It also advanced the proposal that Parties should report on emissions of sulphur oxides owing to the mounting evidence of the importance of aerosols to climate patterns.

⁹ This paragraph, formerly paragraph 7, has been moved from the section on cross-cutting issues as it relates to inventories only.

¹⁰ It should be noted that by decision 3/CP.1, the COP requests Parties to submit national inventory data on emissions by sources and removals by sinks on an annual basis, recognizing that for some greenhouse gases and sectors or activities annual data may be less readily available or less relevant; on this basis, data (where appropriate, updated) for the period 1990-1993 and, where available, for 1994 should be provided by 15 April 1996; data for subsequent years should be provided annually on 15 April, following the same principles. A Party (Switzerland) expressed its interest in contributing to discussions on the frequency of reporting of inventory data, in particular implementation of a selective approach based on data availability and improvements in estimation methods.

¹¹ At its second session, the SBSTA endorsed proposals contained in document FCCC/SBSTA/1996/3 regarding the revisions to the Guidelines to ensure consistency with COP 1 decisions (document FCCC/SBSTA/1996/8, para. 60). This change would ensure consistency with decision 4/CP.1, and is discussed in paragraph 26 of document FCCC/SBSTA/1996/3.

¹² This phrase would not be required if paragraph 14 were deleted, as proposed in this note.

¹³ As indicated in the second compilation and synthesis, a "bottom-up" approach was used by 17 Parties, 10 of which used the CORINAIR methodology. Of these, only a few provided all these pieces of information in their national communications.

¹⁴ See endnote 11.

¹⁵ This addition is based on the suggestion made by a Party (Australia). The current IPCC reporting requirements on inventories attribute emissions in the energy sectors to the point of combustion, with the effect that all electricity use is attributed to the electricity supply sector, making it difficult to reconcile the quantitative impact of policies and measures - which generally focus on energy use - and the inventory. This issue is under discussion for possible inclusion in revised IPCC Guidelines for National Greenhouse Gas Inventories. As the process of reviewing these guidelines will not be completed before the second session of the Conference of the Parties, the recommendation was made that this reporting requirement be included in the current version of the national communication guidelines.

¹⁶ These areas were identified in the compilation and synthesis and during in-depth reviews as meriting clarification, as, frequently, they were not covered in the communications. Providing a brief description on these topics would not represent much additional work.

¹⁷ See endnote 11.

¹⁸ For Parties using the IPCC methodology, to enable full reconstruction of the inventory, with regard to standard table 1A, it would be necessary to provide, in addition, worksheet 1.2 on traditional biomass burned for energy; standard table 4C on rice cultivation - flooded rice fields would require in addition worksheet 4.2 on methane emissions from flooded rice fields; table 4E on prescribed burning of savannas should be provided with worksheet 4.3 on this submodule; table 4F on field burning of agricultural residues should be provided with worksheet 4.4 on this submodule; standard tables 5A through to 5D on land-use change and forestry should be provided with all the related worksheets; standard table 6A on solid waste disposal on land should be provided together with worksheets 6.1 and 6.1 (supplemental); and standard table 6B on waste water treatment should be provided together with all the sheets of worksheets 6.2 and 6.3 on methane emissions from domestic and commercial waste water treatment and methane emissions from industrial waste water treatment. If Parties feel that the provision of all this data on an annual basis is onerous, one could envisage alternatives, such as the provision of information to enable inventories to be reconstructed once every two or every five years. The provision of this information, however, should not require much additional work by Parties, and could reduce the amount of supplementary material submitted.

¹⁹ This paragraph is redundant if the IPCC Guidelines for National Greenhouse Gas Inventories are used, as they recommend reporting emissions from bunkers separately. Furthermore, it should be noted that the addendum to this document on methodological issues deals specifically with the question of reporting on emissions from bunkers. When considering the proposed changes to this paragraph, the SBSTA may also consider the options presented in the section on bunkers of the addendum on methodological issues.

²⁰ A Party (the United States) suggested that, in the light of the inadequate reporting on inventories of carbon sequestration, standardized reporting of a number of important parameters would better present the status of carbon sinks. The Party noted that little additional work would be required of Parties as a result of this change, as it is likely that this information would have been prepared in order to assemble the sequestration data presented in their earlier communications. The compilation and synthesis notes, in addition, with regard to this source category, that 12 Parties did not present removals separately from emissions. Furthermore, it is useful to note that the final IPCC Guidelines for National Greenhouse Gas Inventories differ from the Draft Guidelines for National Greenhouse Gas Inventories

(which Parties were recommended to use for the first national communications) in that, in some instances, emissions and removals are now to be reported separately in standard tables and worksheets. Issues related to the land-use change and forestry sector are also discussed in the addendum to this document on methodological issues. When considering the proposed changes to this paragraph, the SBSTA may also consider the options presented in the section on land-use change and forestry of the addendum on methodological issues.

²¹ In-depth review reports indicate that some Parties had implemented policies and measures with significant mitigation effects before the base year, and which should also be included in the discussion.

²² A Party (the United States) suggested this change, noting that many cost-effective options are available to regional and local authorities. The in-depth review reports also stress the importance of action taken at the state or local levels, in particular where jurisdiction for implementation lies at these levels.

²³ A Party (the United States) proposed, in its submission, that information on policies and measures be presented by sector.

²⁴ See endnote 11.

²⁵ This text was proposed by a Party (the United States) in its submission.

²⁶ This change has been introduced to ensure consistency with the IPCC terminology on source categories.

²⁷ See endnote 26.

²⁸ A Party (Poland) expressed the opinion that the word "should" ought to be changed to "may", as it was not possible to fulfil the provisions in that paragraph, *inter alia*, to protect trade and production secrets. Two other Parties (Uzbekistan and Japan), however, felt that there should be more precise instructions for describing policies.

²⁹ This change, which was introduced at the suggestion of a Party (France), is intended to reflect, *inter alia*, the growing importance of cost efficiency in the international debate, its mention in the Convention itself and, more recently, in the IPCC's Second Assessment Report, and its importance in some of the work of the Global Environment Facility. In this context, both during in-depth reviews and in the compilation and synthesis, it has been noted that the term "cost of policies and measures" could refer to different notions, including, *inter alia*, cost-benefit analysis, marginal costs, total costs of implementing a programme or sectoral plan (which might be reflected in the budget allocation to that programme) and the total cost at the national level, including impact on GDP.

³⁰ This paragraph should be deleted if the change in paragraph 16 is retained.

³¹ This addition is based on the submission from a Party (France). It should be noted also that, at the request of Parties (see annex I to decision 10/1 in document A/AC.237/76), the compilation and synthesis of the first 15 national communications received by the secretariat (A/AC.237/81) took up the issue of implementation of this commitment under the Convention.

³² In-depth reviews indicated in several cases that projections described in the national communications were based on policies and measures which were merely planned and whose funding or legal status was uncertain, and which subsequently were not implemented.

³³ A Party (Australia) supported the suggestion made in paragraph 30 of document FCCC/SBSTA/1996/3, but added that, in its experience, it was very difficult in practice to distinguish between the impacts of closely related measures focused on the same subsector. Thus the ranking of individual policies and measures according to their relative importance in mitigation would be a second-best option, but nevertheless preferable to providing no discrimination at all on the relative strengths of various policies and measures. Another Party (Switzerland) also noted that detailed descriptions of measures and expected effects were sometimes difficult, if not impossible, to provide, and that ranking of measures according to their relative importance was an interesting option. It noted further that to keep reporting at a reasonable level, only the most important measures should be included (for example, those accounting for more than 75 per cent of expected effects). As an alternative to a standard table, a list of minimum items could be developed that characterize most important measures.

³⁴ This suggestion was made in response to the request by the SBSTA to provide more specific guidance on the description of policies and measures and their effects, using, where feasible, standardized formats and tables, and also drew on the submissions from two Parties (the United States and Japan).

³⁵ See endnote 32.

³⁶ This change is based on the suggestion contained in the submission by a Party (the United States), the justification for which was that this would help to understand the Party's view of possible future emissions trends and reduction efforts.

³⁷ This paragraph, formerly paragraph 8, has been moved from the section on cross-cutting issues as it relates to projections only.

³⁸ This change was based on the submissions from three Parties. Australia also expressed support for the secretariat's proposal contained in paragraph 19 of document FCCC/SBSTA/1996/3, noting that, in part, this information would assist in preparing global emissions projections. The United States favoured the alternative formulation that projections be provided 15 years into the future at five-year intervals. For example, projections made now would provide information for the years 2000, 2005 and 2010; and by 2000, the communications would project emissions for 2005, 2010 and 2015.

³⁹ This suggestion was advanced by a Party (the United States) in its submission.

⁴⁰ This suggestion was made in response to the request by the SBSTA that more specific guidance be provided on the description of projections and underlying assumptions, using, where feasible, standardized formats and tables, and also drew on the submission by a Party (the United States).

⁴¹ The compilation and synthesis and in-depth reviews identified this as an area for clarification.

⁴² This change is based on the suggestion contained in the submission by a Party (the United States).

⁴³ Values for the base year would be known, and would not have to be assumed.

⁴⁴ This proposal was made by a Party (the United States) in its submission to the secretariat.

⁴⁵ In its submission, a Party (Australia) supported the inclusion of this text as discussed in paragraph 37 of document FCCC/SBSTA/1996/3. In addition, it should be noted that the issue of corrections to inventory data for trade in electricity and for climate variation is discussed in greater detail in the addendum to this document on methodological issues.

⁴⁶ This change has been introduced to ensure consistency with decision 4/CP.1 of the COP, paragraph 1 (a).

⁴⁷ These areas are referred to in Article 4.1(e) of the Convention. In addition, in its submission to the secretariat, a Party (Japan) noted that additional guidance was required with regard to information on vulnerability and adaptation measures to be included in national communications.

⁴⁸ This change is based on the submission of a Party and COP decision 13/CP.1, which, *inter alia*, urges other Parties to include in their communications, where possible, information on measures taken for the transfer of technology. It is proposed that Annex II Parties report on the transfer of financial resources, and Annex I Parties on the transfer of technology.

⁴⁹ These areas represent a compilation of suggestions contained in the submissions by two parties (Canada and the United States), as well as those areas identified in document FCCC/SBI/1996/5.

⁵⁰ Tables 9 to 11 are proposed in response to the request by the SBSTA, at its second session, to develop, where feasible, standardized formats and tables. In addition, in its submission to the secretariat, a Party (Japan) noted the importance of clarifying what information on financial support and transfer of technology ought to be included in communications and of using tabular format for the provision of information to enhance comparability. With regard to table 11, the Party also noted that greenhouse gas reduction resulting from the financial support should be estimated to the extent possible.

⁵¹ This distinction was suggested by a Party (the United States) in its submission.

⁵² This text is proposed to allow Parties to provide more detailed information on individual projects and programmes, and to give Parties the opportunity to provide specific information on private sector activities as suggested by the SBI, which requested, at its second session, that revisions to the guidelines on the transfer of technology reflect the third option for reporting outlined in document FCCC/SBI/1996/5.

⁵³ In its submission to the secretariat, a Party (Uzbekistan) expressed the view that more detailed information should be provided on the main results of research.

⁵⁴ The secretariat's proposal (FCCC/SBSTA/1996/3, para. 31) was supported by a Party (Australia) in its submission.

⁵⁵ Although not always presented in national communications, in-depth reviews concluded that this information was of central importance.

⁵⁶ This outline is based on similar outlines for the compilation and synthesis and for in-depth review reports (see, for instance, decision 2/CP.1 of the COP, annex III).

⁵⁷ If these assumption are moved to table 8 as proposed, they may be deleted from this list (see also paragraph 30 of this annex).
